

**FIG. 1**

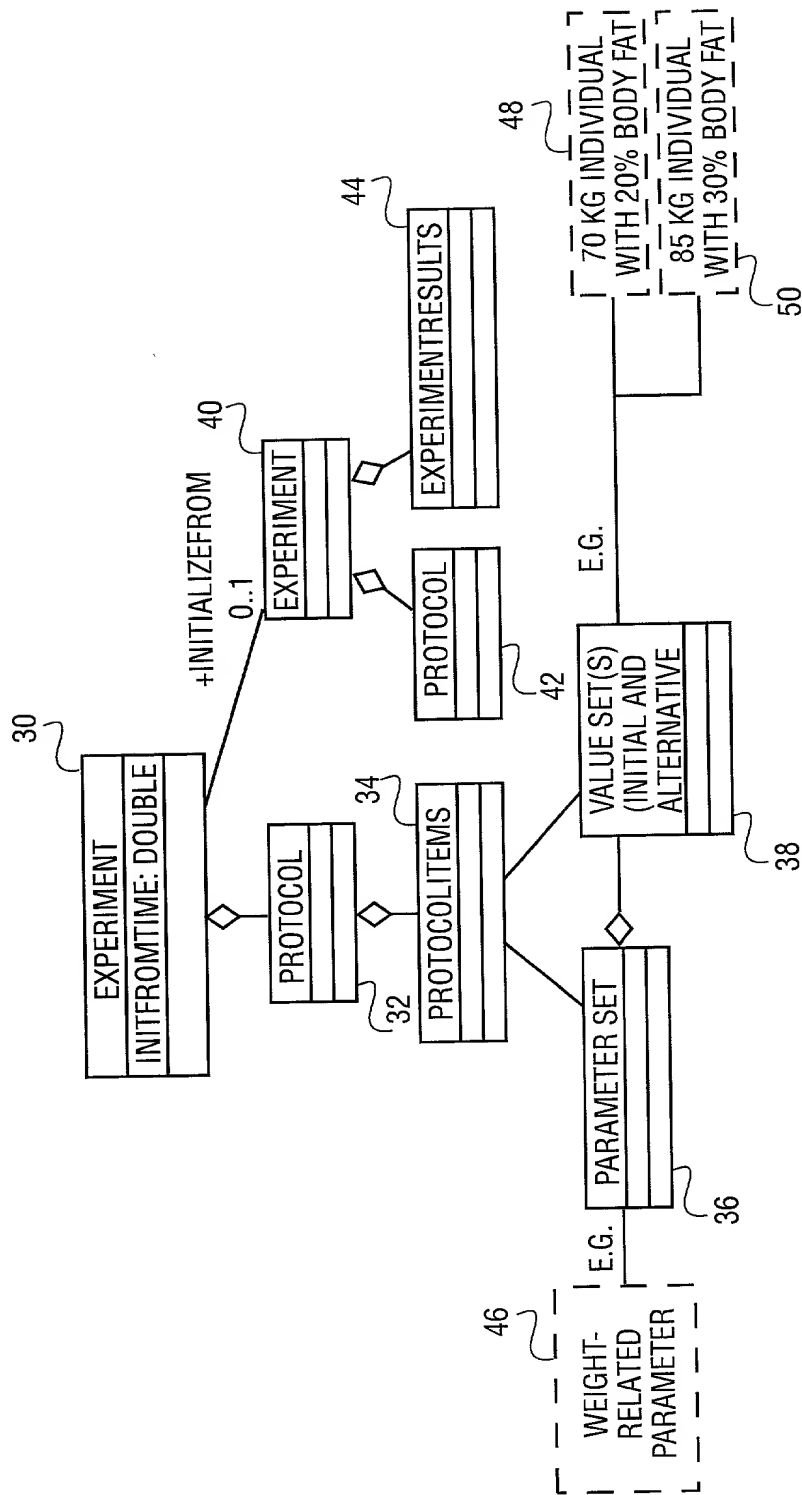


FIG. 2

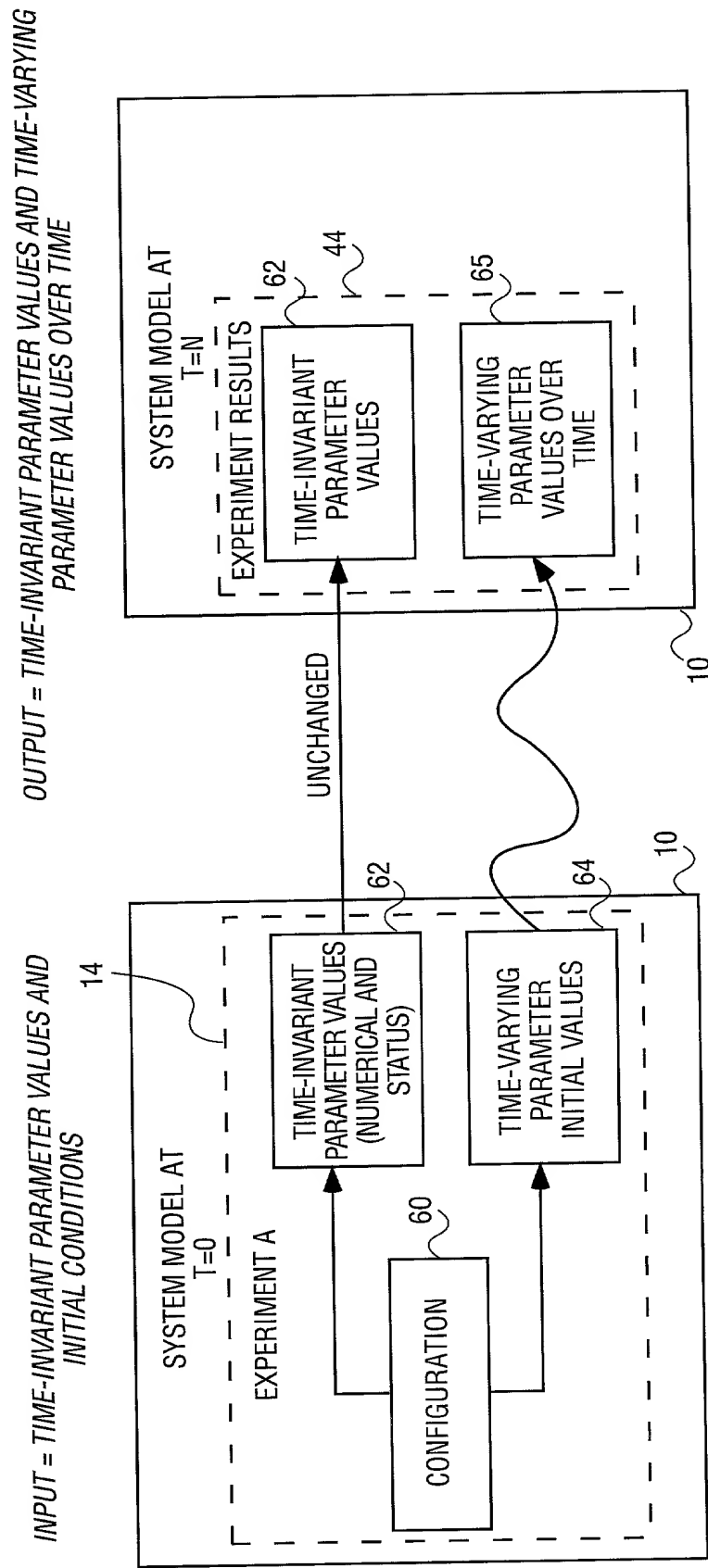
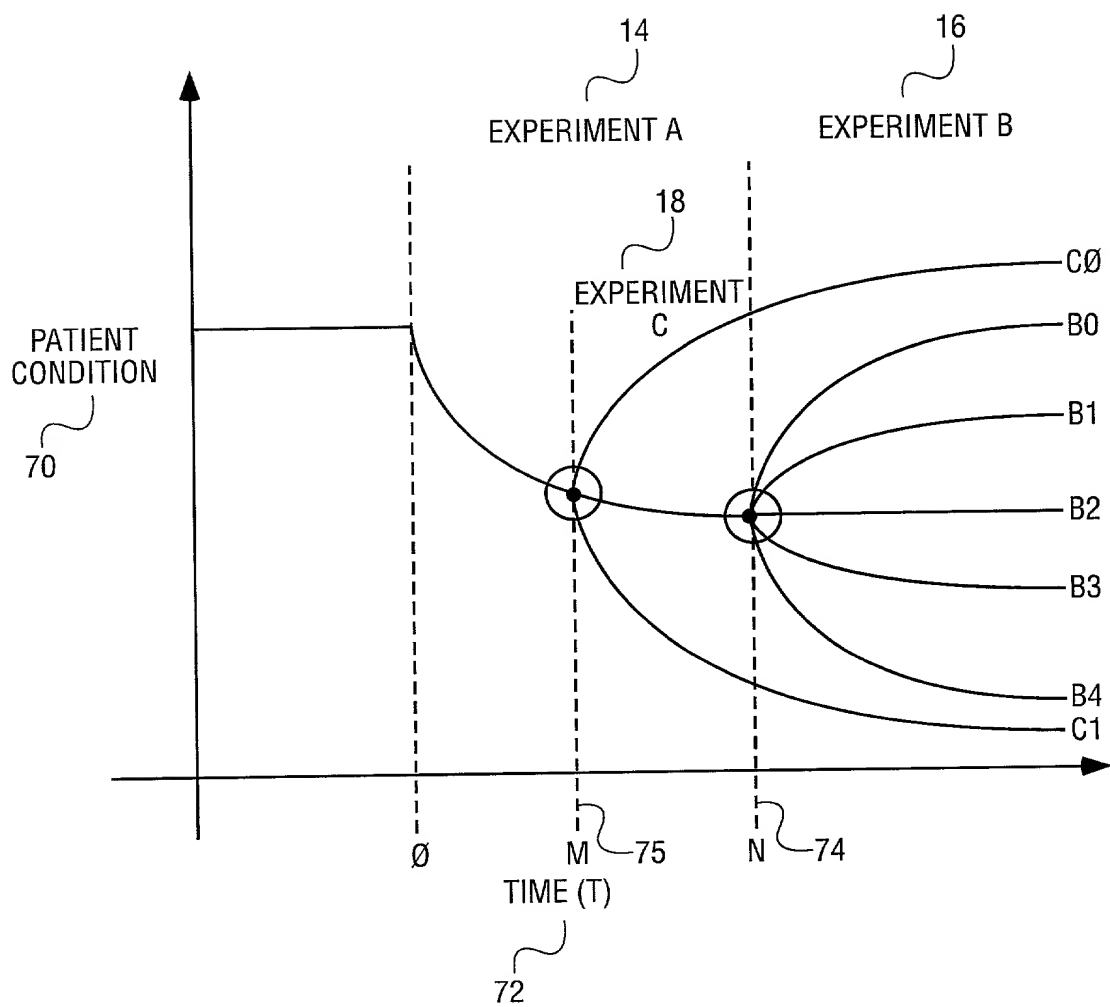
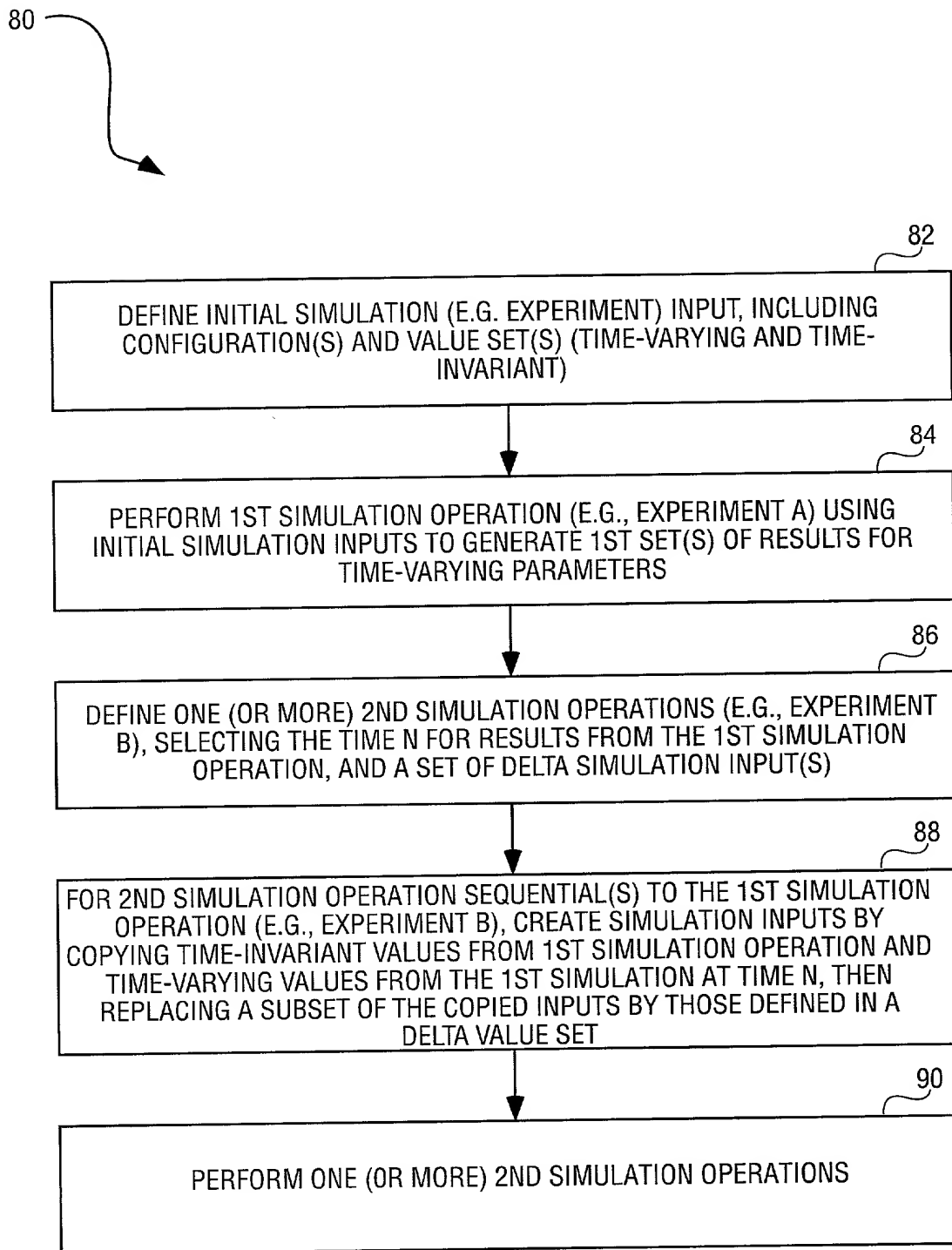


FIG. 3



**FIG. 4**



**FIG. 5**

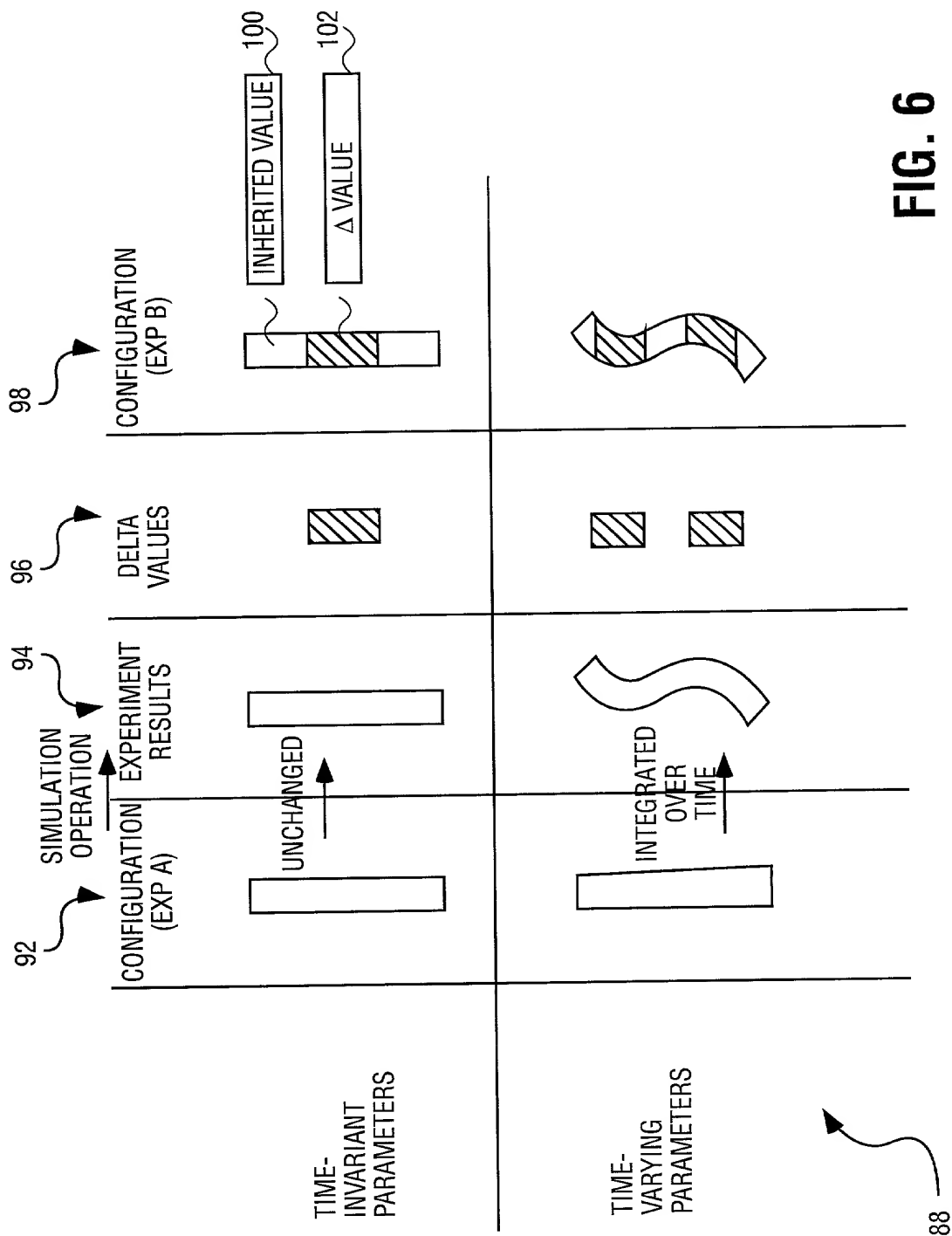


FIG. 6

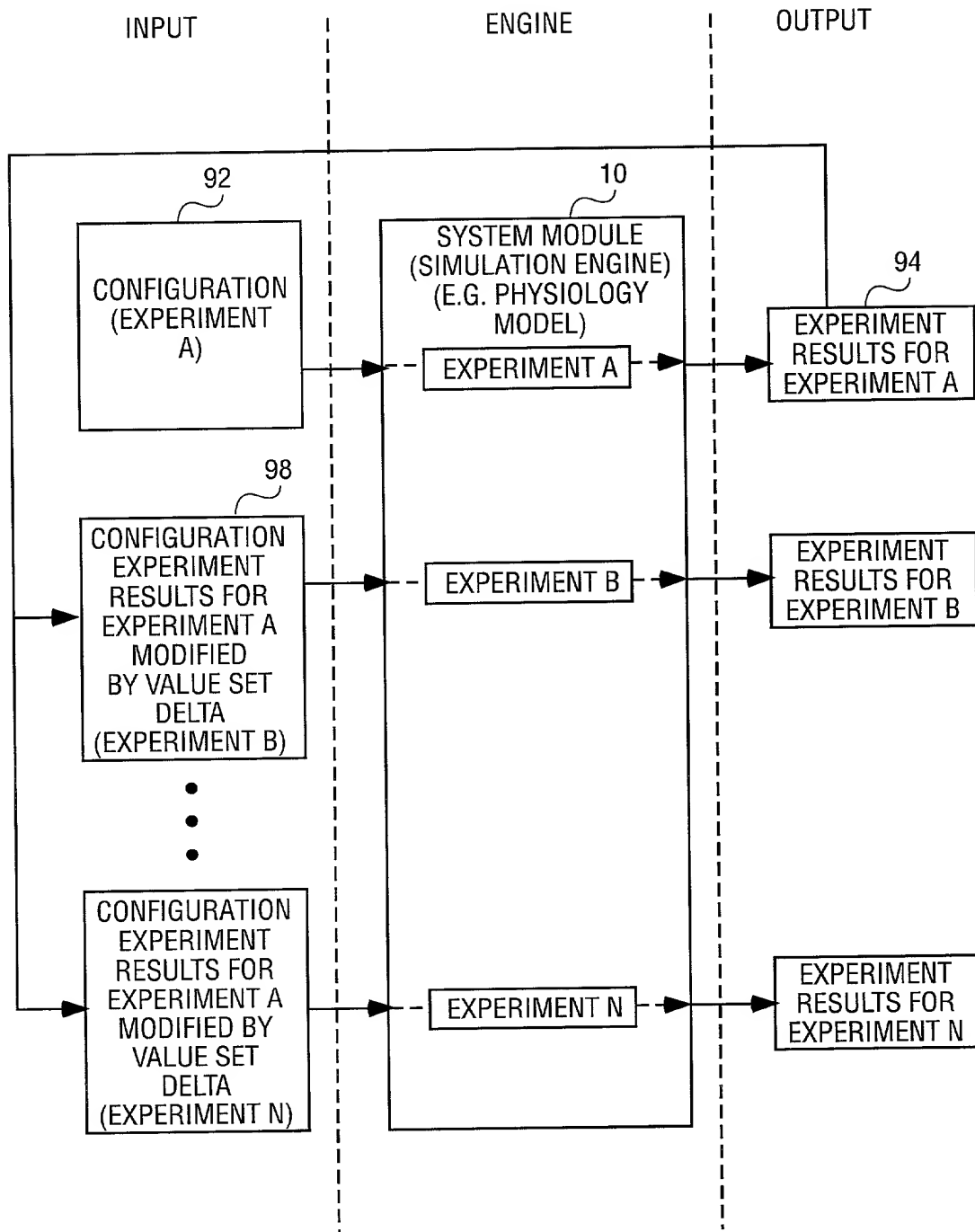
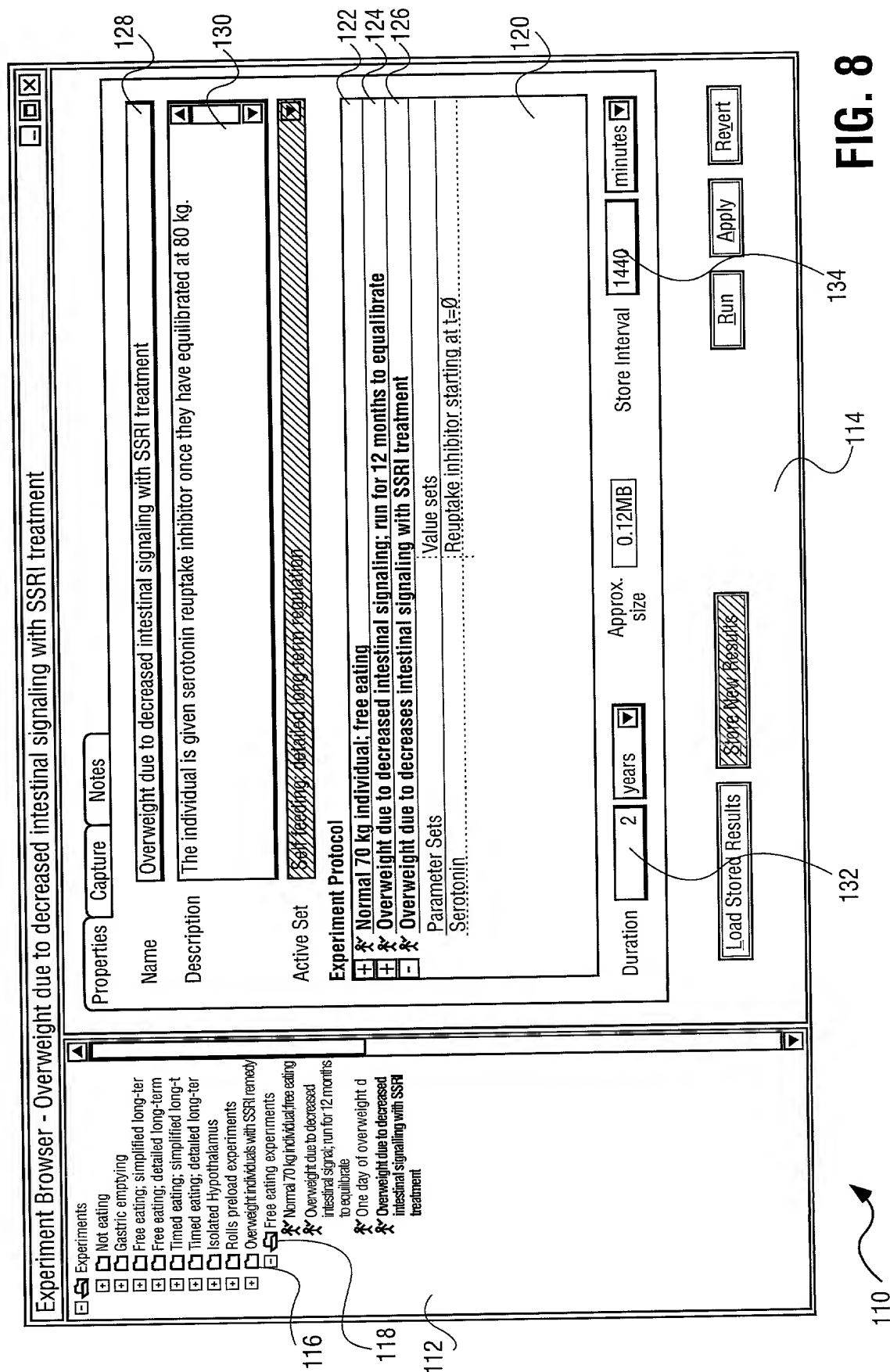


FIG. 7





Experiment Browser - Overweight due to decreased intestinal signaling with SSRI treatment

Experiments

☒ Not eating  
☒ Gastric emptying  
☒ Free eating; simplified long-term  
☒ Free eating; detailed long-term  
☒ Timed eating; simplified long-term  
☒ Timed eating; detailed long-term  
☒ Isolated Hypothalamus  
☒ Rolls pre-load experiments  
☒ Overweight individuals with SSRI remedy  
☒ Free eating experiments  
☒ Normal 70 kg individual; free eating  
☒ Overweight due to decreased intestinal signal; run for 12 months to equilibrate  
☒ One day of overweight d  
☒ Overweight due to decreased intestinal signaling with SSRI treatment

Properties

Capture

Notes

Overweight due to decreased intestinal signaling with SSRI treatment

The individual is given serotonin reuptake inhibitor once they have equilibrated at 80 kg.

Active Set

☒ Self-feeding; detailed long-term regulation

Experiment Protocol

☒ Normal 70 kg individual; free eating  
☒ Overweight due to decreased intestinal signaling; run for 12 months to equilibrate

Parameter Sets

Intestinal nutrient stimulation of satiety hormone: Reduced signaling; free eating

Weight-related parameters (initial conditions): 80 kg individual with 27.5% body fat

Values captured at: 12 months

☒ Overweight due to decreased intestinal signaling with SSRI treatment

Parameter Sets

Reuptake inhibitor starting at t=0

Duration

2 months

Approx. size

0.12MB

Store Interval

1440 minutes

Load Stored Results

Store New Results

Run

Apply

Revert

FIG. 9

110

Parameter Set - Weight-related parameters (initial conditions)

Parameter Set

Name

Weight-related parameters (initial conditions)

Description

Use this parameter to specify the initial parameters related to body weight, such as stored fat, muscle mass, and mass of other tissues. These differ depending on if the individual is in an overweight or normal weight state

Value set

Name

80 kg individual with 27.5% body fat

Description

An individual starting at 80 kg with 22 kg of fat.

Notes...

Format...

Parameter	Location	Type	Baseline Value Set	Alternate Value Set	Units
Status	body weight	<input checked="" type="radio"/>	Computed	80 kg individual with 27.5% body fat	
So	stored adipocyte IG	<input type="radio"/>	14000	Computed	g
So	average fat mass	<input type="radio"/>	14	22000	kg
So	adipocytes	<input type="radio"/>	2.000000e+010	22	number of
So	body weight	<input type="radio"/>	70	80	kg
Status	average body weight	<input type="radio"/>	Computed	Computed	kg
So	average body weight	<input type="radio"/>	70.09	27.6	kg
So	mass of other tissues	<input type="radio"/>	26.6	29	kg
Status	mass of skeletal muscle	<input type="radio"/>	Computed	Computed	kg
So	mass of skeletal muscle	<input type="radio"/>	28	5.8e+006	mg
So	muscle protein	<input type="radio"/>	5.6e+006	29	kg
So	mass of brain	<input type="radio"/>	1.4	29	kg
So	basal muscle	<input type="radio"/>	28	29	kg
So	required muscle mass	<input type="radio"/>	28	29	kg

FIG. 10

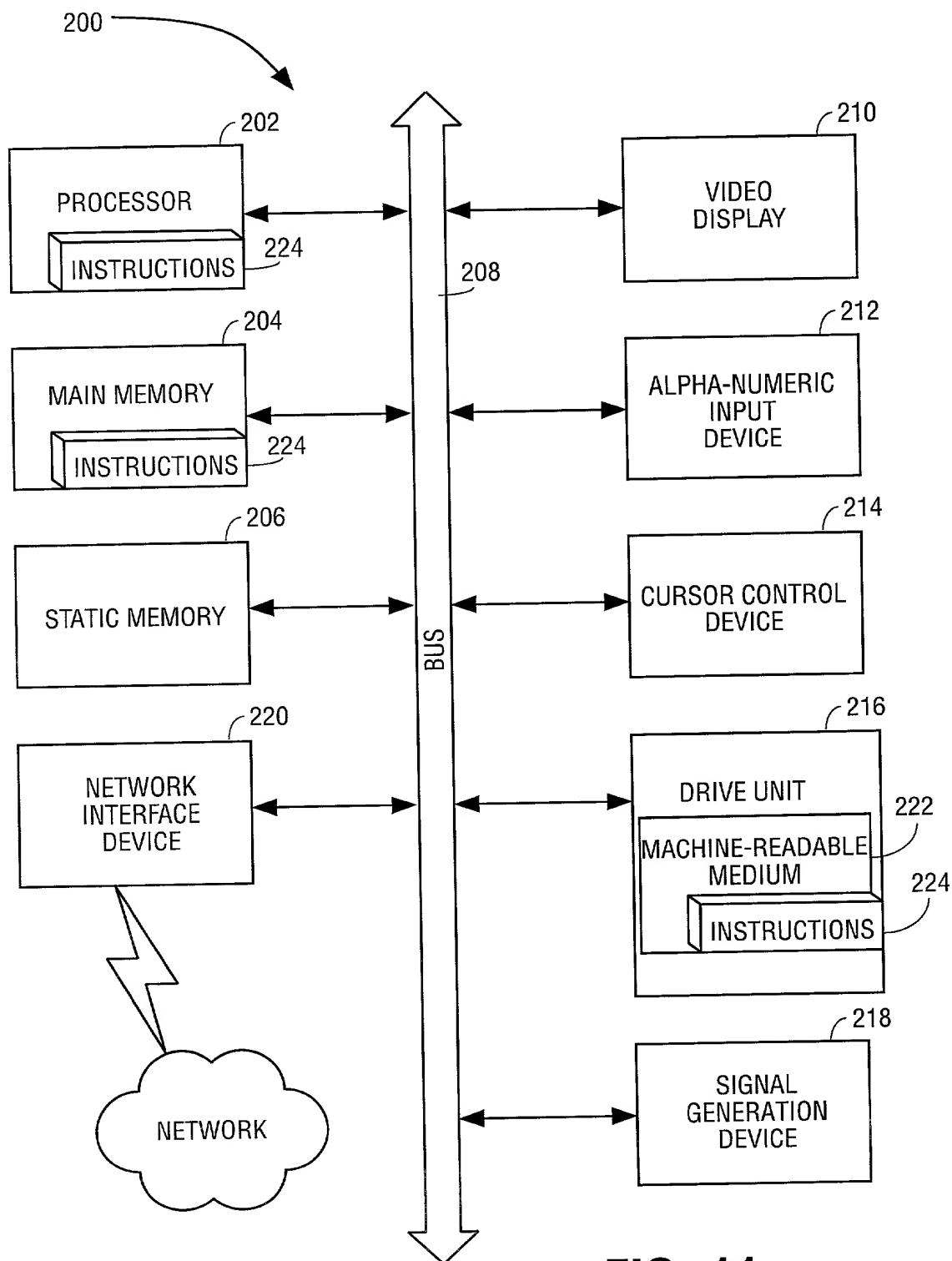


FIG. 11